WHAT IS CLAIMED IS:

1. A commutator motor, comprising:

a stator comprising a stator yoke having a tubular shape and extending in its axial direction and having an inner peripheral surface, and a field magnet fixed to the inner peripheral surface of the stator yoke for providing a field magnetic pole in the stator; and

an armature rotatably disposed within the stator;

wherein the stator yoke is constituted by one of (a) a plurality of plate-like annular bodies having iron parts which are stacked on each other coaxially in the axial direction of the stator yoke, and (b) a plurality of substantially identically configured iron plate-like arcuate bodies disposed at such position as to form a part of virtual annular bodies and which are stacked on each other coaxially in the axial direction of the stator yoke; and

wherein the plurality of plate-like annular bodies or the plate-like arcuate bodies adjacent to each other in the stacked direction are fixedly connected to each other by caulking.

2. The commutator motor as claimed in claim 1, wherein at least one pair of convex portions protrude radially inwardly from the inner peripheral surface of the stator yoke for retaining the field magnet between the convex portions.

3. The commutator motor as claimed in claim 2, wherein

the plurality of plate-like annular bodies or the plate-like arcuate bodies have an inner peripheral surface defining the inner peripheral surface of the stator yoke, and

wherein at least one pair of convex portions protrude radially inwardly from the inner peripheral surface of the plurality of plate-like annular bodies or the plate-like arcuate bodies for retaining the field magnet between the convex portions.

4. The commutator motor as claimed in claim 1, wherein the stator yoke has a non-magnetic portion at a substantially center portion of the field magnetic pole in a radial cross-section of the stator yoke.

5. The commutator motor as claimed in claim 4, wherein the non-magnetic portion is defined by a hollow groove extending in the axial direction of the stator yoke and formed in the inner peripheral surface of the stator yoke.

6. The commutator motor as claimed in claim 4, wherein the stator yoke is constituted by a plurality of substantially identically configured iron plate-like arcuate bodies, and wherein the non-magnetic portion is made from a non-magnetic bar members extending in the axial direction of the stator yoke and held between confronting ends of the arcuate bodies, a combination of two arcuate bodies, and two non-magnetic bar members providing an annular body.